

**REMARKS**

Upon entry of this amendment, claims 26-35 are currently pending in this application. Claims 1-12 and 19-25 have been canceled without prejudice or disclaimer in favor of the pending claims or as being directed to non-elected subject matter. Applicants reserve the right to file these canceled claims in one or more continuation and/or divisional applications. Claim 26-30 have support in the specification on page 10, lines 3-15. The remaining claims have support in the original specification and claims as filed. Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow.

**1. 35 U.S.C. §112 2<sup>nd</sup> paragraph**

Claims 1 and 3 are rejected as indefinite for the recitation of “abnormality,” “interaction,” and “one or more kinase functions.” Although not acquiescing to the Examiner’s rejections, claims 1 and 3 have been canceled and the new claims that have replaced these claims do not contain this language. It is believed that these rejections are now moot.

**2. 35 U.S.C. §112 1<sup>st</sup> paragraph**

Claims 1-4, 10 and 20-25 are rejected as lacking enablement because the Examiner alleges that the disclosure of binding by a region in the N-terminus of shc to autophosphorylated EGFR, HER-2 or TRKA is not sufficient to support claims directed to the treatment of cancer or neoplasia by administering an agent which binds to an APB domain.

Although applicants do not necessarily agree with the Examiner position in rejecting these claims on this basis, the pending claims do not recite that the administration of the an agent treats cancer or neoplasm in a patient. Rather the claims are directed to a method for altering transduction in an APB domain-containing signal transduction pathway comprising administering to a patient a therapeutically effective amount of an agent which decreases binding between an APB recognition region present in a first protein and an APB domain

present in a second protein. Applicant believe that the specification provides enablement of the claimed invention.

The specification provides sufficient support for the claimed method in which an agent, which is selected using the guidance provided in the specification, beginning on page 23, lines 26, and on page 29, line 16, decreases binding between an APB recognition region present in a first protein and an APB domain present in a second protein.

Moreover, the specification discloses the amino acid sequence of a polypeptide that comprises an APB domain that is disclosed in Figure 1. This polypeptide sequence is claimed in the parent application, now U.S. 5,807,989. The knowledge of this sequence allows a skilled person to identify agents that can bind to the APB domain and agents that can bind to an APB recognition region and study the interaction of the binding between the APB domain and APB recognition region.

Applicants wish to reemphasize that it is not necessary to exemplify every embodiment of the application, and direct the Examiner to the Court's holding in *In re Angstadt and Griffin*, 190 USPQ 214, 218 (Fed. Cir. 1986), that "...applicants are not required to disclose every species of a claim even in an unpredictable art..., each case must be determined on its own facts."

The present specification provides an *in vitro* example beginning on page 29, line 16, that describes affinity binding methods in which an APB domain containing protein is exposed to various potential bind agents using standard routine techniques known in the art.

Applicants believe that the pending claims overcome the enablement rejections set forth by the Examiner by more clearly defining the invention. In view of the foregoing arguments and the language of the pending claims, it is requested that this rejection be withdrawn.

**3. 35 U.S.C. §112 1<sup>st</sup> paragraph**

Claim 1 is rejected as containing subject matter which was not described in the specification to allow a person skilled in the art to practice the present invention for the recitation of "at least one signal transduction pathways." Although not acquiescing to the correctness of this rejection, the pending claims do not contain this language.

Conclusion

Applicants kindly request entry of this amendment because it does not raise any new issues and it places the claims in better condition for appeal. In light of the revised set of new claims and the foregoing arguments, applicants submit that all claims will be in condition for allowance. Applicants solicit an early indication to that effect. Should the examiner believe that further discussion of any remaining issues would advance the prosecution, she is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date March 16, 2001

By

Jayme A. Huleatt

FOLEY & LARDNER  
Washington Harbour  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007-5109  
Telephone: (202) 672-5475  
Facsimile: (202) 672-5399

Jayme A. Huleatt  
Attorney for Applicant  
Registration No. 34,485